§ 90.537

12.5 kHz of spectrum bandwidth until December 31, 2016.

(3) The licensees designated in paragraph (d)(2) of this section must, no later than January 31, 2017, file a declaration through the Universal Licensing System that they are operating these channels at a voice efficiency of at least one voice path per 6.25 kHz of spectrum bandwidth.

[63 FR 58651, Nov. 2, 1998, as amended at 65 FR 53645, Sept. 5, 2000; 65 FR 66655, Nov. 7, 2000; 67 FR 76701, Dec. 13, 2002; 70 FR 21673, Apr. 27, 2005]

EFFECTIVE DATE NOTE: At 72 FR 48861, Aug. 24, 2007, § 90.535 was amended by revising the introductory text and paragraph (a), effective October 23, 2007. For the convenience of the user, the added and revised text is set forth as follows:

$\S\,90.535\,$ Modulation and spectrum usage efficiency requirements.

Transmitters designed to operate in 769-775 MHz and 799-805 MHz frequency bands must meet the following modulation standards:

(a) All transmitters in the 769-775 MHz and 799-805 MHz frequency bands must use digital modulation. Mobile and portable transmitters may have analog modulation capability only as a secondary mode in addition to its primary digital mode. Mobile and portable transmitters that only operate on the low power channels designated in §§90.531(b)(3), 90.531(b)(4), are exempt from this digital modulation requirement.

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§ 90.537 Trunking requirement.

(a) General use channels. All systems using six or more narrowband channels in the 764-776 MHz and 794-806 MHz frequency bands must be trunked systems, except for those described in paragraph (b) of this section.

(b) Interoperability channels. Trunking is permitted only on Interoperability channels specified in §90.531(b)(1)(iii). Trunked use must be strictly on a secondary, non-interference basis to conventional operations. The licensee must monitor and immediately release these channels when they are needed for interoperability purposes.

[66 FR 10636, Feb. 16, 2001]

EFFECTIVE DATE NOTE: At 72 FR 48861, Aug. 24, 2007, \$90.537 was amended by revising paragraph (a), effective October 23, 2007. For the convenience of the user, the added and revised text is set forth as follows:

$\S 90.537$ Trunking requirement.

(a) General use channels. All systems using six or more narrowband channels in the 769–775 MHz and 799–805 MHz frequency bands must be trunked systems, except for those described in paragraph (b) of this section.

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§ 90.539 Frequency stability.

Transmitters designed to operate in 764-776 MHz and 794-806 MHz frequency bands must meet the frequency stability requirements in this section.

- (a) Mobile, portable and control transmitters must normally use automatic frequency control (AFC) to lock on to the base station signal.
- (b) The frequency stability of base transmitters operating in the narrowband segment must be 100 parts per billion or better.
- (c) The frequency stability of mobile, portable, and control transmitters operating in the narrowband segment must be 400 parts per billion or better when AFC is locked to the base station. When AFC is not locked to the base station, the frequency stability must be at least 1.0 ppm for 6.25 kHz, 1.5 ppm for 12.5 kHz (2 channel aggregate), and 2.5 ppm for 25 kHz (4 channel aggregate).
- (d) The frequency stability of base transmitters operating in the wideband segment must be 1 part per million or better.
- (e) The frequency stability of mobile, portable and control transmitters operating in the wideband segment must be 1.25 parts per million or better when AFC is locked to a base station, and 5 parts per million or better when AFC is not locked.

[63 FR 58651, Nov. 2, 1998, as amended at 65 FR 53646, Sept. 5, 2000]

EFFECTIVE DATE NOTE: At 72 FR 48861, Aug. 24, 2007, §90.539 was amended by revising the introductory text, effective October 23, 2007. For the convenience of the user, the revised text is set forth as follows:

§ 90.539 Frequency stability.

Transmitters designed to operate in 769-775 MHz and 799-805 MHz frequency bands must meet the frequency stability requirements in this section.

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